



Airworthiness Concern Sheet

DEPT. OF TRANSPORTATION
DOCKETS

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Make, Model, Series, Serial No.:

The Lancair Company, LC40-550FG and LC42-550FG Serial Numbers 40004 through 40079 and 42002 through 420062.

Reason for Airworthiness Concern: Incorrect takeoff performance data resulting in insufficient runway length by up to 65% and potential impact with terrain or obstruction.

FA Description of Airworthiness Concern (Who, What, Where, When, How? Attachments: RA and appropriate data)

On January 4, 2005, during flight testing for the addition of an air conditioning system, the performance data published in the Airplane Flight Manuals (AFM's) for the above model airplanes was discovered to be incorrect. Using information available at this time, the takeoff distances published in the AFM's may be as much as 65 percent low for ground roll and 50% low for distance to clear a 50 foot obstacle. This incorrect information could mislead the pilot into attempting a takeoff with insufficient runway length or insufficient obstacle clearance distance.

The aircraft manufacturer has requested the issuance of this AD.

Cost of this AD to the operators should be minimal, since it only requires modification of the AFM via a hand-written note on the performance pages and the insertion of the appropriate service bulletin. These changes can be accomplished by a pilot.

Compliance:

Required as indicated below:

Modify the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual (AFM) as Follows:

- (1) Before further flight, make the following notation in ink next to the takeoff distance chart (Figure 5-7) in Section 5 of the AFM: *"Caution: See Service Bulletin SB-05-001 for takeoff performance correction."* Insert a copy of Lancair Service Bulletin SB-05-001 into Section 5 of the AFM.
- (2) Terminating Action: Incorporation of the next revision of the Pilot's Operating Handbook and FAA Approved Airplane Flight Manual which will include a correction to the takeoff performance information.

Request for Information (Proposed Alternate Inspection/Repair Procedures, **Cost Impact**, Etc. Note: Any comments or replies to the FAA need to be as specific as possible. Please provide specific examples to illustrate your comments/concerns.):

Attachments: *SDR(s) ☐ *A/IDS ☐ *SL(s) ☐ *SAIB ☐ *FAASR/*NTSBSR ☐ *AD ☐ *AMOC ☐ *RA ☐

Notification: FAA XXX, *AOPA XXX, *EAA, Type Club, *TC Holder XXX, Other:

Response Requested __/__/__: Emergency (10 days) XXX Alert (30 days) ☐ Information (90 days) ☐
(Space Bar Adds "X" to Check Boxes)

This Airworthiness Concern Sheet (ACS) is intended as a means for FAA Aviation Safety Engineers to coordinate airworthiness concerns with aircraft owner/operators through associations and type clubs. At this time, the FAA has not made a determination on what type of corrective action (if any) should be taken. The resolution of this airworthiness concern could involve an AD action or an SAIB, or the FAA could determine that no action is needed at this time. The FAA's final determination will depend in part on the information received in response to this ACS.

The FAA endorses dissemination of this technical information to all manufacturers and requests association and type clubs comments.

*Service Difficulty Reports (SDRs); Accident/Incident Data System (A/IDS); Service Letter (SL); Special Airworthiness Information Bulletin (SAIB); Federal Aviation Administration (FAA)/National Transportation Safety Board (NTSB) Safety Recommendation (FAASR/NTSBSR); Airworthiness Directive (AD); Alternate Method of Compliance (AMOC); Risk Assessment (RA); Aircraft Owners & Pilots Association (AOPA); Experimental Aircraft Association (EAA); Type Certificate (TC)